



CLIMATE CHANGE ADVISORY COMMITTEE

August 11, 2009

MEETING MINUTES

Tuesday, August 11, 2009, 2:00 PM at 1510 East Grant Road in the Ward 3 Council Office, Tucson, Arizona.

Primary CCC Members in Attendance

- Phil Swaim, Swaim Associates
- Paul Green, Tucson Audubon Society
- Pat Patton, UA Eller School of Business
- Jane Poynter, Paragon Space Development Corp
- James MacAdam, Watershed Management Group
- Ana Maria Lopez, UA College of Medicine
- Varga Garland, Community Food Bank

Alternate CCC Members in Attendance

- Terry Galligan, Old Pueblo Community Foundation
- Barbara Warren, Physicians for Social Responsibility
- Julie Evans, Native Seeds/SEARCH
- Curtis Lueck, Curtis Lueck and Associates
- Carl Rosborough, Fred G. Acosta Job Corps
- Jan Gordley, Gordley Design

Staff in Attendance

- Nicole Urban-Lopez, Office of Conservation and Sustainable Development (OCSD)
- David Schaller, OCSD
- Laura Burge, Ward 6
- Ries Lindley, Tucson Water

Public in Attendance

- Mariana Gonzalez, Intern with OCSD
- Tedra Fox, Pima County
- Joe Abraham, UA
- Julie Burguiere, Repower America

AGENDA ITEMS

1. Call to Order / Roll Call

- A quorum was established and the meeting commenced at 2:08 p.m.

2. Welcome and Introductions

3. Approval of Amended Minutes for July 14, 2009

- James McAdam moved to approve the July 14, 2009 meeting minutes. The motion was seconded by Varga Garland. Motion passed unanimously by a voice vote of 7 to 0.

4. Legislative Updates

- David Schaller reported that Mayor and Council adopted a new voluntary residential Green Building Program on August 5, 2009. A link for more information about the program will be posted on the CCC website.
- David also reported that the House of Representatives passed the American Clean Energy and Security Act (also known as Waxman-Markey) and the bill will now go to committee in the Senate after the August recess. Copies of an executive summary and fact sheet about the House version of the legislation were distributed. Representatives Giffords and Grijalva voted in favor of the bill.

5. General Updates

- Nicole Urban-Lopez clarified that both primary and alternate members can serve on and chair subcommittees. If a primary member is appointed to a subcommittee and can not attend, their alternate member can attend and vote in their absence.
- Nicole clarified the attendance requirements for alternate committee members. Alternate members only receive an absence if both the alternate and their primary are absent from a meeting. This is because alternate members do not count toward quorum unless their primary is not in attendance. Nicole encouraged primary committee members to communicate with their alternates so they are aware of when they will not be in attendance. If primary and alternate members want to switch positions, staff can do this administratively without going to Mayor and Council.
- Nicole also reported that when members attend meetings via teleconference they are not marked as absent, but they do not count toward quorum and they can not vote.
- Phil reported that there are two reports that may be of value to the committee: the 2007 SDAT report and the AIA 5050 report which has a goal of reducing GHG emissions from buildings by 50% by 2010 and achieving carbon neutrality by 2030. Staff will post links to these reports on the CCC website.
- David announced that the State of California recently released a Climate Adaptation Strategy. Staff will post a link to the report on CCC website.
- Staff reminded the committee that their website is:
www.tucsonaz.gov/ocsd/climatechangecommittee

6. Presentations on utility renewable energy/energy efficiency programs

Denise Smith from Tucson Electric Power (TEP) provided the presentation summarized below.

A sheet outlining TEP's commercial energy efficiency and renewable energy programs was distributed.

- Most of the programs were launched last year, so TEP is still collecting data on their success and expects it to take 3-5 years to ramp-up all of the programs.
- The funding for the energy efficiency programs comes from two fees that all TEP customers pay, one for renewables and one for demand side management. The money does not go to the ACC, it goes straight to the utility and TEP reports it and the use of it to the ACC. If the funding for a program is over-collected, then the remaining funds roll over into the next year. If they are under-collected, TEP makes up the difference from their budget.
- Demand Side Management (DSM) Programs
 - o New Construction Program- incentive for the design phase up to \$10,000 to assist with a LEED design, then a rebate is offered for the energy efficiency elements.
 - o Large Business Program- offers rebates for energy efficiency retrofits. The rebate is based on the kWh savings achieved with each upgrade. For example, a \$15 rebate is given per exit sign replaced. TEP is asking the ACC for more money for this program because they already used the initial \$750,000 allocated.

- Small Business Program- also offers rebates for energy efficiency retrofits, but this program is run through contractors. TEP has a budget of \$1 million for this program. Customers under 200 kw are eligible.
- Lighting Program- partnered with Loews, Costco, Wal-Mart, Ace Hardware, etc. to buy-down the cost of CFLs and then the savings are passed on to the customer. CFLs are becoming the standard, so TEP is looking at other technologies such as LEDs to incentivize.
- TEP is researching a program to offer early retirement rebates for HVAC systems.
- 90% of new homes built in Tucson will have the TEP Guarantee.
- The low-income weatherization is offered in conjunction with Tucson Urban League and Pima County's Community Development and Neighborhood Conservation Department.
- Renewables (customer side)
 - The ACC recently approved a renewable energy standard tariff (REST) which requires electric utilities to supply 15% of their energy from renewables by 2025. There is a ramp-up plan that requires a certain percent each year until 2025. For distributed generation, 50% must be for residential and 50% for commercial. TEP is trying to push the market on solar hot water heaters because they are more cost effective than PV systems. Renewable energy credits cost three times less for solar hot water heaters than for PV systems.
 - On the ground solar installations: Global Solar system 750 kW, Pima County 1 MW at the wastewater plant is in progress, which will be the largest in the state.
 - TEP commented that wind is not a cost-effective approach to energy generation in southern Arizona. Current installations are showing a 30 year payback.
 - GreenWatts program- customers can purchase renewable energy credits from landfill gas and TEP uses the revenues for solar installations on schools and non-profit organizations. \$700,000 has been raised since 2000 when the program was launched.
 - TEP is researching a program to allow people to buy into community solar installations.
- Utility-scale renewables
 - 5 MW of landfill gas since 1999.
 - 5 MW PV system in Springerville, AZ installed between 2000-2003.
 - Other projects are in the works and will be announced soon.
 - It was asked if TEP plans to move off of coal generated electricity. It was explained that the price of coal would have to reach \$50-\$60 per ton of coal for TEP to start backing down, and \$200 per ton to shut down a coal plant entirely. If the prices for coal get high enough, then it would become more cost effective to move to gas-fired or renewable energy. At some point, it should become just as cost effective to do renewable energy as it is to continue with coal-fired plants.
 - TEP is a founding member of The Climate Registry and will report 2008 statistics in September. TEP will only report CO2 for this program, though they do report on CO2, sulfur oxide (SOX), nitrogen oxide (NOX), and water to the ACC. www.theclimateregistry.org
 - TEP is researching smart grid technology. Current initiative is to install meters that can be read remotely and send data back through their communications system for residential customers. Eventually, smart meters will be a necessity for utilities.
- Staff distributed a sheet outlining the related programs Southwest Gas offers.

7. Review draft inventory of potential mitigation measures

- Staff distributed a portion of the GHG inventory that has been compiled.
- The mitigation strategies included in the inventory are limited to those relevant to Tucson and those that the City has the authority to implement.
- Strategies related to schools, wastewater treatment, and airports are excluded because the City does not have jurisdiction over them. It was commented that strategies related to Davis-Monthan Air Force Base and the UA should be excluded.
- There are is additional 50-60 mitigation strategies that will be added to the inventory once research on those measures is complete.
- One challenge is to understand our baseline data so we don't take credit for what we are already doing. Expanding or changing an existing program may yield better results that can be captured.
- Staff will add a column to the matrix that identifies whether the City is already implementing a strategy to some degree.
- It was commented that strategies should not be removed from the list just because it is something Tucson is already doing to some degree.
- Curtis Lueck offered to help identify what is being done in terms of transportation.
- Staff will add a column that identifies why a strategy is effective. Ex. Why are roundabouts effective? Because they result in less idling.
- It was suggested that the committee review the matrix and make additions based on their expertise. Committee members were asked to send their additions to David and Nicole within 2 weeks. Staff will email the matrix to the committee.

8. Discussion of screening criteria for evaluating mitigation measures

- Staff distributed a list of potential screening criteria for review. Staff will also email the matrix to the committee.
- Staff is pre-screening for legal authority.
- It was commented that the cost-benefit analysis include measures that we are already implementing to determine if we are already doing something effective that should be continued.
- Dr. Overpeck reported that he does not teach a class at the UA, but he can help recruit faculty to work on a cost-benefit analysis for next semester.
- Dr. Lopez will talk to a professor in the Psychology department about utilizing their program evaluation class.
- It was suggested that a draft scope of work be compiled for the cost-benefit analysis to help identify students or a consultant to conduct the study.
- A suggestion was made to utilize PAG's ThinkTank program for coming to consensus on measures.
- Staff reported that the software used for the Regional Greenhouse Gas Emissions Inventory (CACP) is available for the analysis. The software has some emissions factors specific to the Tucson area. Some calculations will have to be done by hand.
- It was suggested that the unintended consequences of the mitigation measures and their relationship to potential adaptation measures be added as a screening criteria. Staff suggested that the adaptation subcommittee review the mitigation measures and how they interface with adaptation strategies.
- It was suggested that cost vs. value criteria be added to the list. This will also help identify revenue opportunities.

9. Discussion and creation of subcommittees

- Any CCC member can attend subcommittee meetings, they just can not vote on matters unless they are appointed to the subcommittee.
- David will schedule the first adaptation subcommittee meeting for September.

10. Future Agenda Items

- a. Discussion of screening criteria for evaluating mitigation measures.
- b. Review and discussion of scope of work for greenhouse gas reduction measures analysis, who could potentially complete the analysis, and alternative action plans for completing the analysis.
- c. Education about carbon trading/economics.
- d. Education about building energy use.

11. Call to the Audience

- Julie Burguiere from Repower America reported that there are 7 people from the organization working in Arizona to promote the urgency of dealing with the current climate crisis.

12. Adjournment at 4:03 p.m.